

ABSTRACT

A method of orienting a spherical object comprising the steps of acquiring an image of a spherical object at an imaging station; analyzing the image with a first computer to determine an analysis; transferring the object from the imaging station to orienting stations using a transfer mechanism; and orienting the object to a predetermined orientation according to the analysis; wherein the orienting stations comprise first, second, and third stations each rotating the object about a single axis; the first, second, and third stations collectively orienting the object by rotation about alternately perpendicular axes. In one embodiment, at least one of the orienting stations is at least partially mounted onto the transfer mechanism. In another embodiment, the transfer mechanism is a compliant object carrier that is movable translationally and substantially immovable rotationally. In an alternate embodiment, the ball is orientated with a gimbaled mechanism. An object orienter is also disclosed.